

CLAIMS

What is claimed is:

1. A table saw, comprising:
 - a support including an aperture for extending a circular saw blade therethrough, the support including a workpiece support surface for supporting a workpiece to be cut;
 - an alignment fence adjustably mounted to the table saw, said alignment fence being configured for positioning the workpiece to be cut with respect to the circular saw blade;
 - an arbor mounted to the table saw generally opposite the workpiece support surface, said arbor being arranged for adjustably supporting the circular saw blade; and
 - a kerf intrusion device coupled to the arbor such that the kerf intrusion device is disposed in the kerf formed in a workpiece by operation of the circular saw blade, said kerf intrusion device including a side pressure splitter at least partially positioned in the kerf formed in the workpiece by operation of the circular saw blade, the side pressure splitter being directed towards the alignment fence, wherein the kerf intrusion device side pressure splitter is orientated such that the side pressure splitter biases a portion of the workpiece being cut between the kerf intrusion device and the alignment fence into contact with the alignment fence.
2. The table saw claim 1, wherein a kerf intrusion device is at least one of a riving knife and a backsplitter.
3. The table saw of claim 1, wherein the side pressure splitter is a tab formed unitarily with the kerf intrusion device.
4. The table saw of claim 1, wherein the side pressure splitter is biased by a spring.

5. The table saw of claim 1, wherein the side pressure splitter includes a trailing edge configured to engage a workpiece to prevent the workpiece from traveling towards the circular saw blade.
6. The table saw of claim 1, wherein the side pressure splitter is a flexible strip having a first and a second end, the strip being at least partially connected to the kerf intrusion device proximate the first end and the second end so as to act as a leaf spring.
7. The table saw of claim 1, further comprising at least one anti-kickback pawl coupled to the kerf intrusion device, said at least one anti-kickback pawl being formed to engage a workpiece being directed toward the alignment fence by the side pressure splitter, if the workpiece moves away from the workpiece support surface.
8. The table saw of claim 1, further comprising a pair of opposing rails mounted, substantially perpendicular to the portion of the circular saw blade extending through the support, on opposite sides of the support, the rails being constructed for slideably mounting the alignment fence thereto.

9. A table saw, comprising:

a support including an aperture for extending a circular saw blade therethrough, the support including a workpiece support surface for supporting a workpiece to be cut;

an alignment fence adjustably mounted to the table saw substantially parallel with the circular saw blade, said alignment fence being configured for positioning the workpiece to be cut with respect to the circular saw blade;

a beveling arbor mounted to the table saw generally opposite the workpiece support surface, said arbor being arranged for adjustably supporting the circular saw blade; and

a back splitter coupled to the arbor whereby the back splitter bevels with the arbor so that the back splitter is disposed in the kerf formed in a workpiece by operation of the circular saw blade, said back splitter including a side pressure splitter at least partially positioned in the kerf formed in the workpiece by operation of the circular saw blade, the side pressure splitter being directed towards the alignment fence,

wherein the side pressure splitter is orientated such that the side pressure splitter biases a portion of the workpiece between the back splitter and the alignment fence into contact with the alignment fence.

10. The table saw of claim 9, wherein the side pressure splitter is a tab formed unitarily with the back splitter.

11. The table saw of claim 9, wherein the side pressure splitter is biased by a spring.

12. The table saw of claim 9, wherein the side pressure splitter includes a trailing edge configured to engage a workpiece to prevent the workpiece from traveling towards the circular saw blade.

13. The table saw of claim 9, wherein the side pressure splitter is a flexible strip having a first and a second end, the strip being at least partially connected to the back splitter proximate the first end and the second end so as to act as a leaf spring.
14. The table saw of claim 9, further comprising at least one anti-kickback pawl coupled to the back splitter, said at least one anti-kickback pawl being formed to engage a workpiece being directed toward the alignment fence by the side pressure splitter, if the workpiece moves away from the workpiece support surface.
15. The table saw of claim 9, further comprising a pair of opposing rails mounted, substantially perpendicular to the portion of the circular saw blade extending through the support, on opposite sides of the support, the rails being constructed for slideably mounting the alignment fence thereto.

16. A table saw, comprising:
 - a support including an aperture for extending a circular saw blade therethrough, the support including a workpiece support surface for supporting a workpiece to be cut;
 - an alignment fence adjustably mounted to the table saw, said alignment fence being configured for positioning the workpiece to be cut with respect to the circular saw blade;
 - an arbor mounted to the table saw generally opposite the workpiece support surface, said arbor being arranged for adjustably supporting the circular saw blade; and
 - means for maintaining contact between the workpiece and the alignment fence generally opposite the cutting zone of the circular saw blade.
17. The table saw claim 16, further comprising at least one of a riving knife and a back splitter.
18. The table saw of claim 16, wherein said contact maintaining means is configured to engage a workpiece to prevent the workpiece from traveling towards the circular saw blade.
19. The table saw of claim 16, further comprising at least one anti-kickback pawl, said at least one anti-kickback pawl being formed and arranged so as to engage a workpiece being directed toward the alignment fence by the side pressure splitter, if the workpiece moves away from the workpiece support surface.
20. The table saw of claim 16, further comprising a pair of opposing rails mounted, substantially perpendicular to the portion of the circular saw blade extending through the support, on opposite sides of the support, the rails being constructed for slideably mounting the alignment fence thereto.